

# MATH INTERVENTIONS UPDATE

A MONTHLY UPDATE FOR THE MATHEMATICS ACHIEVEMENT FUND GRANT

OCTOBER 2015

VOLUME 4 – ISSUE 2



## SCHEDULES

Thanks to all of the MITs for submitting schedules for review by the KDE. I have reviewed all of the MIT schedules that have been submitted to date. I am currently providing feedback to each MIT. For some schedules, I have a few questions to help me understand your schedule and how it works at your school.

I mainly looked at the following requirements pulled directly from the RFA and the Assurance Document:

- ❑ The MAF grant requires a full-time mathematics intervention teacher working with primary students (K-3) only. So, to stay in compliance with the MAF grant, the MIT must utilize his or her time for primary mathematics intervention. Even if your school or district has to supplement the salary or additional expenses with other funding (e.g. Title I, Title II, SBDM, etc.), it does not allow the school to change what is required by the grant. (Full time teacher, primary mathematics)
- ❑ *"At least half of the mathematics intervention teacher's time will be spent delivering intensive, pull-out mathematics interventions to primary grade students..."* Please consider the amount of the instructional minutes during the day when revising your schedule. A MIT should be delivering mathematics interventions at least 50% of his or her time. Collaboration, Planning, Progress Monitoring, Paperwork, PLCs, etc. should not exceed intervention time on the schedule.
- ❑ The MIT may have equal supervisory duties to other teachers in the building, but not more than other certified staff. The MITs job is to be an intervention teacher – not a substitute, not a lunch room monitor, not a playground monitor, etc.

Remember – I am always here to help. I am an advocate for you and what is best for your students. All of us have to be good stewards of the grants and follow the requirements of the MAF RFA to ensure the money is protected in the future.

Thank you – Pamela Pickens

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## Department of Education

Office of Next-Generation Learners  
Division of Learning Services  
Differentiated Learning Branch

Associate Commissioner: Dr. Amanda Ellis  
Division Director: Gretta Hylton  
Branch Manager: April Pieper  
Math Intervention Consultant: Pamela Pickens

## Yearly KDE Requirements:

### Beginning of the School Year

- ☒ Assurance Statement & Budget Summary
- ☒ Orientation Meeting
- ☒ Schedule Sent to the KDE

### By October 30<sup>th</sup>

- ☐ Infinite Campus Intervention Tab Utilized

### By January 30<sup>th</sup>

- ☐ Infinite Campus Intervention Tab Updated
- ☐ MIT Mid-Year Survey

### By March 30<sup>th</sup>

- ☐ Infinite Campus Intervention Tab Updated

### End of the School Year

- ☐ Infinite Campus Intervention Tab Completed
- ☐ MIT End-of-Year Survey

# INTERVENTION TAB



## MORE DETAILED DIRECTIONS FOR THE IC INTERVENTION TAB

All students serviced by Mathematics Achievement Fund interventionists will be required to use the Intervention Tab in Infinite Campus for 2015-16. In general, the expectation is that once you have your intervention student roster, you will "open" an intervention plan for each student in Infinite Campus. The tab is under the individual student, under general, under PLP and is labeled simply, "Intervention." You will complete the entire plan for each student, with the understanding that a few fields will not be applicable to your circumstances, and a few fields are optional. The KDE will pull data on October 30<sup>th</sup>, January 30<sup>th</sup>, March 30<sup>th</sup>, and June 30<sup>th</sup>. Please have records updated by those times.

Please make sure that you have access to Infinite Campus by contacting your principal or technology coordinator. If you have any questions, please let us know as soon as possible.

### Steps to enter students in the Intervention Tab:

- ☐ Log in to Infinite Campus.
- ☐ Go into a student's record. Click on the **PLP** tab.
- ☐ Go to "**General**" and you will see "**Intervention**" in the top right hand corner. When you click on "**Intervention**" you will see "**New Status**".
- ☐ The status date and time will automatically be opened by IC. However, if you began interventions last week and do not enter them on the intervention tab until next week you can manually override this. The **Start Date** will be the first day of the first intervention session –NOT THE FIRST DAY OF SCHOOL. You will not be able to put the end date at this time.
- ☐ For the **Tier Status**, MAF will probably be either Tier 2 or Tier 3 depending on the school's RTI framework. If you are providing daily one-on-one service, it will most likely be a Tier 3.
- ☐ The **Intervention Type** is #4 for MAF and there is **no course code**.
- ☐ The **Intervention Content Area** is Math.
- ☐ The **Intervention Material** is #5 – a vendor program.
- ☐ The **Materials Codes** are:
  - 3310 for Math Recovery
  - 3314 for Number Worlds
  - 3360 for Do The Math
  - 3379 for AVMR
  - 3380 for Assessing Math Concepts
- ☐ The **Intervention Staff** is #1 – a certified teacher.
- ☐ **Delivery Location** is "On-Site".
- ☐ **Delivery Method** is "In-Person".
- ☐ **Frequency** – select the most accurate description for the selected student.
- ☐ **Area(s) of Student Need** – select all skill areas that apply

As students exit MAF Interventions, please be sure to access his or her Intervention Record to complete the "**Student Service Results**," "**End Date**" and "**Total Hours Served**".

### Questions?

Please contact April Pieper at [april.pieper@education.ky.gov](mailto:april.pieper@education.ky.gov) or at Pamela Pickens [pamela.pickens@education.ky.gov](mailto:pamela.pickens@education.ky.gov)

### Resources for the Intervention Tab -

[http://education.ky.gov/educational/int/ksi/Pages/ksilC\\_InterventionTab.aspx](http://education.ky.gov/educational/int/ksi/Pages/ksilC_InterventionTab.aspx)

# Mathematical Practice of the Month

To emphasize the Mathematical Practices, the CCSS gives them their own distinct section, but they are not to be thought of as a separate skill set to be handled in special lessons or supplements. The intent is that these *essential mathematical habits of mind and action* pervade the curriculum and pedagogy of mathematics, K–12, in age-appropriate ways.

## 2 - Reason abstractly and quantitatively.

Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships: the ability to *decontextualize*—to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to *contextualize*, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved. Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects.

Resource: Common Core State Standards Initiative <http://www.corestandards.org/>

## Anchor Charts for this Mathematical Practice

Resource: Jordan School District <http://elemmath.jordandistrict.org/files/2012/05/Standard-21.pdf>

**Reason abstractly and quantitatively.**  
Mathematical Practice 2


**I can use numbers and words to help me make sense of problems.**

**Numbers to Words**

$2 + 3 = 5$


↓

I have 2 yellow flowers and 3 red flowers.  
How many flowers altogether?



**Words to Numbers**

I have 2 yellow flowers and 3 red flowers.  
How many flowers altogether?



↓

$2 + 3 = 5$

Left – K-1

Right – 2-3

Bottom – 4-5

**Reason abstractly and quantitatively.**  
Mathematical Practice 2

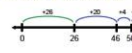
**I can use numbers and words to help me make sense of problems.**

**Numbers to Words**

$26 + 27 = 53$

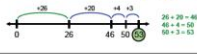
↓

There are 26 boys and 27 girls on the playground.  
How many children are on the playground?



**Words to Numbers**

There are 26 boys and 27 girls on the playground.  
How many children are on the playground?



↓

$26 + 27 = 53$

**Reason abstractly and quantitatively.**  
Mathematical Practice 2

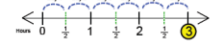
**I can use numbers, words, and reasoning habits to help me make sense of problems.**

**Contextualize (Numbers to Words)**

$\frac{1}{2} \times 6 = 3$  or  $6 \times \frac{1}{2} = 3$

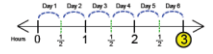
↓

Mary practices the piano  $\frac{1}{2}$  hour a day for 6 days.  
How many total hours does she practice?



**Decontextualize (Words to Numbers)**

Mary practices the piano  $\frac{1}{2}$  hour a day for 6 days.  
How many total hours does she practice?



↓

$\frac{1}{2} \times 6 = 3$  or  $6 \times \frac{1}{2} = 3$

**Reasoning Habits**

1) Make an understandable representation of the problem.

3) Pay attention to the meaning of the numbers.

2) Think about the units involved.

4) Use the properties of operations or objects.



**October 30, 2015** – Infinite Campus Intervention Tab Data Pull

**October 30, 2015** – Fall data and DOR submission deadline

**January 30, 2016** – Mid-Year Survey Due

**January 30, 2016** – Infinite Campus Intervention Tab Data Pull

**March 7-9, 2016** – KCM Conference, Lexington

**March 30, 2016** – Infinite Campus Intervention Tab Data Pull

**April 18, 2016** – Online data and DOR help session – online meeting

**May 30, 2016** – End-of-Year Survey Due

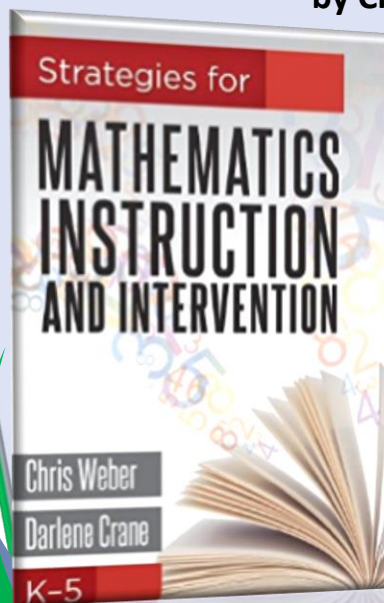
**May 30, 2016** – Spring data and DOR submission deadline

**June 30, 2016** – Infinite Campus Intervention Tab Data Pull

## RECOMMENDED READING

### *Strategies for Mathematics Instruction and Intervention K-5*

by Chris Weber and Darlene Crane (December 2014)



Prepare students to move forward in mathematics learning, and ensure their continued growth in critical thinking and problem solving. In this book, the authors assert that framing mathematics education with an RTI model is essential in order to equip teachers with the instruction, assessment, and intervention strategies necessary to meet the complex, diverse needs of students.

#### Benefits:

- ✓ Examine ways teachers can collaborate to encourage high-impact mathematics instruction.
- ✓ Learn student-directed experiences and teacher-directed instruction that combine to reveal the interconnected nature of mathematics.
- ✓ Use the four phases of mathematical learning to organize units of instruction, so students can demonstrate levels of mastery.
- ✓ Explore how to create assessments for determining students' difficulties and appropriate supplemental interventions.
- ✓ Discover indicators that measure the progress of RTI frameworks.

# MAF RESOURCE PAGES

The Kentucky Department of Education MAF Resource Page -

<http://education.ky.gov/curriculum/conpro/Math/Pages/MAF-Grant.aspx>

The Kentucky Center for Mathematics MAF Resource Page -

[http://www.kentuckymathematics.org/maf\\_resources\\_for\\_2015-2016.php](http://www.kentuckymathematics.org/maf_resources_for_2015-2016.php)

## Awesome Apps



From the creator of the award-winning Montessori Crosswords and Word Wizard apps, **Montessori Numbers** is designed to help build sound mathematical foundations in children aged 3-7 by using a concrete, visually significant material inspired from the Montessori methodology.



While flashcards have some utility in helping people memorize, they are best used after we have mastered a topic and need to build fluency – they are not magic and won't support the development of understanding on their own. **MathTappers: Multiples** is a simple game designed first to help learners to make sense of multiplication and division with whole numbers, and then to support them in developing fluency while maintaining accuracy.



This funny learning game helps kids to develop number sense with the use of their fingers. With **Finger Numbers**, kids can practice to get a better understanding of numbers and operations up to 10 with the use of their fingers to quickly show numbers.

The Kentucky Center for Mathematics (KCM) is on **Pinterest**

So many teachers are using Pinterest to share ideas, now you can follow KCM for even more great ideas!

<http://www.pinterest.com/kcmmath/>

# A Quick Thought



I am often asked what collaboration looks like in the classroom for a Mathematics Intervention Teacher. I wish I could say the question is easily answered, but collaboration is not a simple practice to define. Sometimes classroom teachers are uncomfortable with sharing their instructional time or students with others in the building, like MITs. MITs have to be very strategic with gaining the trust of their collaborative partner. In some

cases, you are changing his or her mathematical thinking and instructional practices. It is a challenge for both teachers involved. Just remember you are also a teacher, not an administrative assistant, not a homework helper, not a paper grader, not a tutor, etc.

## COLLABORATION:

Two or more people working together towards shared goals

## MIT MEETS NEW COMMISSIONER

***Scotty Bratcher, MIT at Oran P. Lawler Elementary in Grayson County, attended the Committee for Mathematics Achievement meeting in Frankfort on October 16<sup>th</sup>. Scotty represents elementary teachers on the committee.***

***It just happened to be Dr. Stephen Pruitt's first day as the state's Commissioner of Education. Dr. Pruitt visited with the members and listened to members advocate for a focus on mathematics.***

***Scotty represented all MITs well and plugged the Mathematics Achievement Fund grant. Thanks Scotty!***

